



THE BASICS ON SUBSTANCE USE AND SERIOUS MENTAL ILLNESS OPIOIDS

PART 1: BASIC FACTS

Description: Opioids include prescription medications for pain relief, heroin, or synthetic opioids like fentanyl or its analogues. Prescription opioids include medications such as oxycodone (Oxycontin®), hydrocodone (Vicodin®), codeine, morphine, tramadol, etc. Synthetic opioids can be deadly and contribute to the majority of overdose deaths. For example, fentanyl is 100 times more powerful than morphine, and a similar synthetic opioid, Carfentanil, is estimated to be 10,000 times more powerful than morphine.

Prevalence: In 2020, the U.S. experienced over 64,000 opioid overdose deaths and over 1.6 million people with opioid use disorder (OUD).¹⁻³ In 2019, over 10 million individuals (4% of the general population) reported opioid misuse. Like other substance use trends, more individuals with SMI use opioids than individuals in the general population¹. Additionally, substance use disorders are more prevalent among the population with SMI compared to the general population and misuse of multiple substances is common.^{1,4}

Reasons for use: The population living with SMI may use opioids and other substances for various reasons including the reduction of their psychiatric symptoms (mood, anxiety, anger, psychosis) in the short-term. There are various opioid receptors which contribute to the rewarding effects of the opioids. The Mu, Kappa, and Delta receptors trigger the euphoria and incentive properties of rewarding stimuli. Additionally, the Kappa receptor triggers the anti-reward effects and produces dysphoric effects while the Delta receptor induces anxiolytic effects. Opioids may provide temporary relief for those facing more challenges in their lives, those with limited productive activities, or those with ongoing mental health symptoms and disabilities. Note that if opioids produce short term relief, there is a risk that the symptoms will rebound and be worse when the opioids wear off.

Opioid Overdose Risk Factors:

The risk of lethal overdose, often unintentional, is what increases the level of concern and the need for specific overdose prevention interventions for individuals with SMI who are using opioids. Note that in addition to the risk factors listed below, individuals who discontinue use for a period (such as while in jail) are at very high risk for overdose. This is due to a reduction in their tolerance level, so if they go back to using at their previous level that can lead to an overdose and death.

Medication or Substance-Related Risk Factors for opioid misuse:

- Higher doses of prescription opioids (over 90 morphine milligram equivalents per day)
- Long-acting or extended-release formulation of opioid medications (methadone, oxycodone, Fentanyl patch)
- Long-term opioid use (over 3 months)
- Powerful synthetic opioid use (i.e., illicit Fentanyl)
- Combining opioids with Benzodiazepines [e.g., lorazepam (Ativan®), diazepam (Valium®), clonazepam (Klonopin®), alprazolam (Xanax®), and others]

Patient-Level Risk Factors:

- History of overdose
- Other diagnosed substance use disorders
- Psychiatric disorders
- Adolescents

- History of suicidality
- Age greater than 65 years old and opioid-dependent
- Respiratory or lung disease
- Kidney or liver disease



Overdose Prevention: Naloxone (Narcan®, Evzio®) is a medication used to reverse an opioid overdose. It can reverse and block the (sedating) effects of opioids. It is available as a nasal spray, prefilled auto-injection device, and as an injectable. Anyone that is prescribed or using opioids or other substances should have a Narcan® kit, be trained how to use it and educated on harm reduction with use. It is best to have another person there when training on how to use naloxone given that the patient will not be administering this on themselves. Many patients do not use alone, in fact it is recommended that they do not use alone given the risks, and so it is important to ask if their friends or acquaintances they use with have training and access to a Narcan® kit. For those with less social supports, case managers can be trained to use Narcan®. In instances where the patient is residing in supportive housing, housing case managers should be trained in the use of Narcan®. Collaboration with the mental health team to ensure there is someone available to the patient that could administer Narcan® in the case of an overdose. If the mental health team needs training on administering Narcan®, contact the local department of health or a community program that likely offers free trainings. Although Narcan® can save a life, it is NOT treatment for an opioid use disorder. More information from NIDA on Naloxone can be found here.

- Effect on the brain and body: Opioids interact with receptors in the brain to reduce the perception of pain. Additionally, misuse of opioids increases dopamine release in the nucleus accumbens. This release with repeated use can shift the actual use of opioids and the activation of the reward pathway to the behaviors/objects associated with the use of the substance. The release of dopamine with conditioning is also linked to desire for opioids and motivation for continued use. Another area of the brain in charge of respiration or breathing is also concentrated with opioid receptors and opioid overdoses can lead to decreased breathing and death. Opioids can also result in drowsiness, confusion, euphoria or a "high", nausea, and constipation. All individuals exposed to opioids regularly, and for prolonged periods, will develop physical dependence. This includes individuals that may be prescribed opioids for chronic pain, but do not have any opioid misuse or concern for substance use disorder. All patients that are physically dependent on opioids, will develop opioid withdrawal symptoms if opioids are discontinued. Opioid withdrawal symptoms include yawning, runny nose, watery eyes, nausea, vomiting, stomach cramps, diarrhea, body aches, chills, insomnia, anxiety, restlessness, and irritability.
- Effects on symptoms: While the use of opioids may provide some temporary relief, the use makes psychiatric symptoms worse in the long run. Many persons who use opioids experience lower motivation, depression, irritability, difficulty with sleeping, and behavioral changes.8
- Effects on medications: Codeine, hydrocodone, morphine, methadone, and oxycodone are substrates of CYP2D6. Psychiatric medications that inhibit CYP2D6 can lead to decreased analgesia of codeine and hydrocodone due to decreased conversion to the active metabolites and increased effects of morphine, methadone, and oxycodone. CNS depressants, such as alcohol and benzodiazepines, can potentiate the sedative effects of opiates. Clinicians should routinely review medications and potential drug interactions.
- Effects on substance use disorders: Individuals with SMI are at greater risk for developing SUDs generally including opioid use disorder (OUD) and comprehensive screening is necessary along with risks for opioid overdose and reviewing overdose prevention. Regular opioid use results in physical dependence over time, and some individuals are at increased risk for developing OUD. Nearly one-third of patients on chronic opioid medications for pain relief develop a substance use disorder (SUD), although there is less risk with short-term (< 2 weeks) opioid therapy for an acute injury.9

PART 2: SCREENING AND INTERVENTION

For individuals with SMI, it is important to not only identify whether the person is using substances, but also to describe the pattern of substance use, whether the substance use is causing harm, and the degree to which the individual is in control of the substance use. Some individuals will have patterns of harmful use that are "in control" and do not meet criteria for the diagnosis of SUD. For individuals with a chronic psychiatric disability, any persistent substance use is likely to be harmful, even if there is no obvious intoxication or lack of control, as the substance use can interfere with the person's fragile brain equilibrium. Other individuals may have patterns of "out of control" substance use that are consistent with moderate to severe SUD. These require different levels of intervention.



Once substance use is identified, the assessment should inquire –for each type of substance - about the pattern of use: experiences and perceptions of harm because of that use pattern and the degree to which the individual experiences control – or lack of control – over that use.

Brief Guide to Screening:

- A. Screening requires practice. Developing a "welcoming" style to facilitate screening takes practice. It is a common concern that the person you are interviewing will not want to talk about their substance use, and that they might not tell the truth. In fact, most people who use substances talk about their substance use all the time; they just don't think it's a good idea to talk to you! How can you convey to the person you are screening that you would be a good person with whom to talk to about their substance use? The key is in the concept of welcoming. If you are genuinely open when the person shares their substance use with you (rather than disapproving or disappointed) they will be much less likely to conceal information. But it takes practice to do that, and to balance the fact that you don't recommend that they use substances with welcoming the opportunity to discuss their substance use openly. Remember that you can't help them make better choices if they don't discuss their choices at all.
- **B.** Screening works best when it is integrated into the person's story. Pulling out a "screening tool" and asking questions one after the other often feels less personal and reinforces the person's natural inclination to say "no" to all the questions, just to get the painful process over with. Using a tool is helpful for the interviewer to remember things to ask about, (and not to forget what to ask), but the art of doing this is to work the questions into the flow of the story so that the person can progressively feel more comfortable sharing (and that areas where the person is uncomfortable sharing can be more clearly identified). Some clients may feel more comfortable answering questions on a screening form, rather than face to face, but many will not.
- **C. Screening for opioid use should be routine in all services delivering care to those with SMI.** Opioid use screening is always embedded in a broader approach to substance use screening. Further, anyone receiving prescribed opioids for pain should be screened for risk of SUD and monitored more closely if they are at risk. Remember, SUDs are more prevalent among the population with SMI compared to the general population, and misuse of multiple substances is common.^{1,10} Another important consideration is that fentanyl and its analogues can be found in heroin, illicit oxycodone, or other pain medications, as well as other illicit substances including cocaine, ecstasy, street Xanax, and others. Patients using any illicit substance should be considered at risk for opioid overdose given this current trend and educated about opioid overdose reversal with naloxone (Narcan®) and provided with a Narcan® rescue kit. See this resource for various screening tools and processes that include screening for benzodiazepine.

Brief Guide to Intervention:

How you talk to people who indicate they are using opioids is always based in a framework of welcoming, empathic, hopeful partnership and needs to be matched to the individual's stage of change for opioid use as well as their personal goals for a happy, meaningful life (recovery goals).¹¹

For instance, an individual is in the precontemplation stage about opioid use, the focus is on helping them move into the contemplation stage, that is to develop enough trust to engage in discussions about their substance use, so they can work in partnership with the team over time (often months) to make better decisions. This discussion may begin with engaging the person in discussion of possible strategies to mitigate the risk of overdose. The most important thing you can do is to maintain a welcoming strength-based relationship, which increases their ability to eventually discuss their substance use more freely. If the person is in the contemplation stage (or beyond this stage), then it is helpful to provide a recommendation of abstinence (without struggling with the person), and while indicating that the most important goal is to help the person make the best decisions for themselves), maintain the option of making progress in tiny steps (as opposed to abstinence being the only goal) and providing awareness of treatment options including medication treatment and how the mental health team can provide support for making even small steps toward change. Note that individuals with OUD should have psychosocial concerns (e.g., anxiety, unemployment, loneliness, relationship problems, housing problems, etc.) met but OUD pharmacotherapy should be offered even if the patient refuses psychosocial treatment. More information is available here about Stages of Change and matching interventions with each stage.



Example vignette: Meeting of the mental health care team with a person with SMI using opioids. The individual is in the preparation stage of change, and the team is using a motivational interviewing approach.

Case: This is a 47-year-old woman with a long history of traumatic relationships who has been receiving mental health services from the clinical care team for several years. She has been diagnosed with "schizoaffective disorder" and hears negative voices on a regular basis. She also has diagnoses of cannabis use disorder and opioid use disorder. She began using opioids after back surgery 5 years ago, and when she began misusing her prescription, her physician stopped prescribing opioids, so she began obtaining opioids (mostly pills, but occasionally heroin or other synthetic opioids, which she snorts) on the street. She has an intermittent relationship with a friend, also served by the SMI team, who is an IV drug user. Her friend recently overdosed and barely survived after being resuscitated by EMS with naloxone. The friend has gone back to using, and the patient is angry and frightened that her friend will overdose and die. She has a good relationship with her team and has been fairly open about discussing her cannabis and opioid use, but has never wanted to make a change, stating that using helps her stay calm and deal with the voices. Today, however, she is asking for help for the first time. The team engages her in a conversation about it, as follows:

Individual: What happened with my friend scared the crap out of me. I don't want him to die, but I can't control that. But I don't want to die either. I know my life ain't much but, you guys have given me a little hope that I don't always have to be messed up. I just want to live to see it. I think I need to do something about using opioids, before I wind up like my friend.

Mental health professional (MHP) or any team member: That's a big step for you to take. What are you thinking you want to do?

Individual: Well, damned if I know. I tried to stop using before...Do you remember? I went to detox about three years ago. That was really hard, and then I went right back to using. Oh, and my voices got worse too when I detoxed. I'm not sure what to do, but I've got to do something.

MHP: You know, we are glad you felt comfortable coming to us and sharing this. We are relieved your friend is okay and understand how scary that must have been. We don't want you to overdose either. Here's the key: There are a lot of tools that we have, to help people who have opioid use disorder. So, you don't have to start with the idea that you have to detox and quit. You have options.

Individual: Really, like what? I don't want to go to one of those methadone programs where you have to show up every day. Those people would stress me out.

MHP: No, we can help you with opioid use in our program. We have two types of treatment available here. The first is buprenorphine which is an opioid, but unlike methadone, you need to have some opioid withdrawal symptoms before you take it. The second option is an opioid blocker called naltrexone that is administered as a monthly injection. When on the injection, or Vivitrol®, you are "blocked" from the high of opioids and reduces the risk for overdosing. Both medications are similarly helpful in treating the overuse of opioids. Both help to reduce your opioid use and cravings. Buprenorphine can be started more quickly than Vivitrol®. You cannot receive Vivitrol until you stop using opioids and most patients do need to go inpatient for detox. What do you think about those options?

Individual: Buprenorphine is the same as Suboxone? I have tried that once I think.

MHP: Yes, buprenorphine is in Suboxone. Suboxone is just buprenorphine and naloxone combined.

Individual: Okay, well...there is no way I am going into detox right now. I am open to Suboxone, can I learn more about that? Do you think my voices will get worse on it?



MHP: It's hard to know exactly how it will affect your voices, but it may be your best approach. How about we schedule a time for you to meet with the doctor to discuss Suboxone? Then you can make a decision. There are also some therapies that can be helpful. We can help you with some skills to help you stop using other opioids, and help you practice asking for help to avoid risky situations. Further, if you're interested, there are 12 step meetings these days that are "medication friendly" and we can help you figure out how to get connected, if and when you decide you want to try that. But one step at a time. Let's have the medication discussion first. In the meantime, let's make sure you are set with your Narcan kit, just in case. Make sure you don't take anything that you are not sure of...fentanyl is now pretty common in heroin, and other substances. If you have any doubts, make sure you are not alone, and you have your kit with you.

PART 3: TREATMENT OPTIONS

ALL PATIENTS (at any stage of change) should be given a naloxone (Narcan®) kit to reverse an opioid overdose, trained how to use this, and educated on harm reduction with use.

The options below are presented in professional language. In presenting these options to an individual with SMI, you would tailor the language.

Medication is recommended in combination with counseling and behavioral therapies. Learn more about Medication Assisted Treatment <u>here</u>. FDA-approved effective medications for opioid use disorder (MOUD) are listed below:

- Methadone Methadone is an opioid agonist that eliminates withdrawal, reduces cravings, and blocks the high from heroin or painkillers. Individuals do not need to be in opioid withdrawal to initiate methadone treatment. Currently, in 2022, methadone can only be given in a specialized methadone clinic.
- <u>Buprenorphine</u> Buprenorphine works similarly to methadone, eliminating withdrawal and drug cravings, but it only partially activates opioid receptors and therefore is safer and has fewer side effects. Buprenorphine can be prescribed by a doctor or an advanced practice nurse and taken at home. The individual must be in opioid withdrawal to initiate treatment with buprenorphine.
- Naltrexone Naltrexone works differently from methadone or buprenorphine and completely blocks the opioid receptors. Naltrexone decreases cravings for opioids to prevent relapse. If a person uses opioids while on naltrexone, it will block opioid "high" and will prevent cravings for more drugs. Oral naltrexone can be prescribed by a physician or an advanced practice nurse and taken at home. However, the monthly injection is preferred over the oral given that poor daily adherence to the oral formulation limits its effectiveness. There is an increased risk of overdose if a person stops treatment or misses a dose and starts using opioids again because their tolerance to opioids is decreased and this puts them at greater risk for overdose.

There is still stigma and a shared "myth" or misinformation that taking methadone or buprenorphine medication substitutes one substance for another. The National Institute on Drug Abuse (NIDA) emphasizes that these medications do not substitute one substance for another. The dosage of medications used in the treatment does not get a person "high"—it helps reduce opioid cravings and withdrawal. It helps restore balance to the brain affected by SUD.

Behavioral Therapies are a form of psychosocial interventions that assists an individual with building self-management skills for managing triggers, cravings, and risky situations, as well as skills for creating a support system (professionals, family/friends, peers) and using that support system by regularly asking for help.

Recovery Support Programs are peer led programs that provide extra support to individuals who are ready for change and looking to practice abstinence from the use of substances. These programs are typically delivered through community and faith-based groups by way of mutual support meetings.



SUD Treatment Groups or Programs are professional supervised programs within outpatient, inpatient, and residential settings. These could be referred to individuals that may benefit from professional stage-matched group interventions.

Comprehensive Integrated Care is often indicated since individuals with SMI and comorbid substance use often have poorer medical outcomes and require care coordination for management of mental health, substance use and medical illnesses. Treatment plans should be individualized to each individual's unique needs and may include medication, counseling or therapies, mutual support groups, and additional psychosocial interventions.

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